1951-52. **File No.** S95(3)/39767

C CLASS P. W. **DEPARTMENT**

J/T. **BRANCH**

Subject:— Water Supply — Lo —

Hukeri Road.

C.L.J. 1952.

1.

File No. S95(3)/39767

Std. Scott. Slip 24-3

From:- The President, Taluka Development Board Gokak, Dist- Belgaum.

To,
The Honourable Prime Minister,
To, The Government of Bombay.

OFFICE OF H. M. FOR FORESTS & AGRICULTURE
Date 1145 / 4-4-9

Sir,

Sub:- Water supply Scheme to Hukeri Road.

I beg to place before your honour the following for your kind consideration.

I At present arrangement is made by the Govt to supply water to the area at Dhupdal which is occupied by the Irrigation Department — The office and surrounding Quarters; by placing an engine and a pumbing set at Dhupadal.

For report
Asst Engr
P.S. (P.W.D)

By this very arrangement water is also supplied to (1) The Sanitorium at Hukeri Road and (2) The Mission Compound at Dhupadal.

II It is hereby humbly requested that Govt should extend the facility of supplying water to Hukeri Road proper which is inhabilled by 2000 - 3000 population It has become a business centre and its population is increasing day by day. The

S-95(3)
305/51/2

supply of water in Hukeri Road. There is always scarcity of water, and it is feared its population will perhaps decrease if arrangement for supply of water is not made.

If arrangement is made, by placing a big engine, to supply water to this area the inhabitants are ready to bear the expensis at a moderate rate. And as it is a growing place it will be a paying scheme as well.

I therefore request your honour to consider this matter favourably and oblige

Yours faithfully.

Gokak
Date 31-3-51

President T.D.Board
Gokak

VKS

Asstt
4/4

H.M.P.W.D.

T.D. (II)
Acknowledged
8/4
10-4-51

P.W.D.

Issue acknowledgment Form
10/4
Smt Kulkarni
15/4

Asstt
Miss Fer...
7/4

ISSUED
6/4/51

P. W. D.
File No. S-95(3)
Serial No. 305

S-95(3)/30522

J

P.W.D.

Submitted.-

2 The accompanying letter dt 31-3-51 from the President, Taluka Development Board, Gokak, Dist Belgaum regarding Water Supply to Hukeri Road p 1-2. may be forwarded to the S.E., K.I.C for report as per draft put up for approval.

Kmk
18-4-51

19/4/51.

JAS.

4 S-95(3)/30522

[Below Letter dt 31-3-51 from the President, Taluka Development Board, Gokak, Dist Belgaum, re: Water Supply to Hukeri Rd.]

—x—

No S-95(3)/30522-J

P.W.D.,

B.C. (B'bay No 1)

24th April, 1951

Fwd. 1-2

Forwarded to the S.E., K.I.C., for report.

Received 26/4/51 with enquiry

Kulle

18-4-51 Sent K 24/4 Explic on 25/5.

By order etc.

J A S

Desai C Sent K 21/4

Khanbil

(Please return this Memorandum)

No.S.95(3)/30522-J.
Public Works Department,
Bombay Castle (Bombay No. 1),
24th April 1951.

Subject:-Water Supply to Mukeri Road.

Forwarded to the Superintending Engineer, Karnatak Irrigation Circle, for report.

By Order of the Governor of Bombay,

Assistant Secretary to the Government of Bombay, Public Works Department.

D.A:-Letter dated 31st March 1951 from the President, Taluka Development Board, Gokak, District Belgaum.

2
/24/4/51.

(Please return this Memorandum)

No.S.95(3)/30522-J.
Public Works Department,
Bombay Castle (Bombay No. 1),
24th April 1951.

Subject:-Water Supply to Mukerf Road.

Forwarded to the Superintending Engineer, Karnatak Irrigation Circle, for report.

By order of the Governor of Bombay,

D.A:-Letter dated 31st March 1951 from the President, Taluka Development Board, Gokak, District Belgaum.

Assistant Secretary to the Government of Bombay, Public Works Department.

2
/24/4/51.

7

No. Bm.26

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 3rd May 1951.

To

The Chief Engineer to
the Government of Bombay,
Public Works Department,
Bombay-1.

Subject:- Water supply Scheme to Hukeri Road.

P. 7

Reference: Government Memo No.S-95(3)/30522-J, dated the 24th April 1951.

2. The present arrangement for the supply of water to the Dhupdal P.W.D.Colony is a small temporary one and it cannot be extended due to limited supply of infiltration water. It may be pointed out here that no water is being supplied by this Department to Karnatak Health Institute both due to shortage of infiltration water and higher head. However, their request to have an installation of their own, to pump raw water to a maximum of 10000 gallons per day from a suitable place downstream of scouring sluice whenever there is flow in the scouring channel has been recommended to Government vide this office correspondence DM 26 dated 29-3-1951. The requirement of the Mission School and Hostel in the vicinity of Ghataprabha colony is quite small and they will be supplied small quantities of water only on condition that the supply will be stopped whenever there is shortage of water for the Colony vide correspondence resting with this office No. Gh.L.B. dated 12-4-1951. Further the Mission School area is at a lower level than that of our colony and it can get the supply without further pumping.

3. Hence, in view of the limited supply of infiltration water, as also Hukeri Road being at a higher level, it is not possible to extend the existing supply of water of the colony to any other place. In this connection I may bring to the notice of Government the report of the Public Health Engineer submitted by him to Government under his No.SW-3-31/9379 dated 12-9-1949 for the supply of water to Karnatak Health Institute, Hukeri Road Station area and its surroundings. That scheme is an independent one and may be considered if the residents of Ghataprabha (former Hukeri Road) are willing to pay the charges.

4. The Government memorandum along with the application of the President, Taluka Development Board, Gokak is returned herewith.

D.A: as above.

Superintending Engineer, K. I. C.

BR/3-5.

S.95(3)
39767

J Sec.

P.W.D.

File No. 536/48 re. Water supply to Karnatak Health Institute, containing the P.H's letter dt. the 12-9-48 refd. to in para. 3 overleaf has been refd. exp. to the Solicitor to Govt. on the 14-5-57. All's return may be awaited.

4/6/57.

put
4.6.57.

Asst (L. & Leg.)
31/5/57

A.A.S.

Encl.

J 715

P.W.D.
File No. 5-95(3)
Serial No. 39767

715

Shri Kale J
11/5 7-5-57

S.95/3/39767.

9.

J.B.E.

Resubmitted.

2. The S.K.K.D.C. has reported that it is not possible to extend the existing supply of water of the Colony to any other place, and suggests that the independent ~~water supply~~ scheme for water supply to Hukeri Road, Dharwad Colony submitted by the P.H.E. under his letter No. S.W. 3-31/9379 dt. the 12-9-49 may be considered if the residents of Ghatprabha (Forest Hukeri Road) are willing to pay the charges.

3. The scheme referred to above costing Rs. 3,55,000/- net or Rs. 4,50,900/- gross excluding P.T. & P. charges, is proposed to supply water to i) M.V.S.M. Poly ii) Dharwad Colony iii) Karnatak Health Institute iv) Industrial concerns and (v) Hukeri road vi) Mallapur Village. It was submitted by the

P.H.E at the sustained of the Karnatak Health Institutes request for water supply to the institute. In view of some other proposal for water supply to the Karnatak Health Institute being come up for consideration, the independent scheme of the P.H.E. was not considered further.

Out of the six parties to which the scheme envisages to supply water, the M.D.S.M. Rly, the Karnatak Health Institute and the Dhupdal colony are getting water by some arrangements. It is therefore a point for consideration whether such a big scheme may be taken up for water supply to the remaining parties only. Before however proceeding further, the P.H.E may, if advised be requested to state whether he can suggest any other suitable & economical alternative scheme for water supply to Hukeri Road than the one submitted under Ref letter dt. the 12-9-49.

Thro. Dt (P.H.E)

ne
8-51.

31-8-51 Dy. No. 5319 Dy. No. 5116 DS (Coy) 11/9

U.O. to P.H.E. to Govt. 6-9-51. PHE's Inward No 2305 dt 11/9/51 PA's Inward No 3249

Preliminary Note on Mukeri Road (now Ghataprabha) Water Supply.

(I) General Description:- Mukeri Road is a railway station 210 miles from Poona on Poona Bangalore link of Southern Railway. It is 34 miles by road from Belgaum. There is a wellknown "Karnatak Health Institute" treating in particular tuberculosis patients. Other important concerns such as glass factory, Prakash Industries and Belgaum Motors have made a beginning. It is situated on the easterly slope of a ridge dividing the Krishna and Ghataprabha valleys.

The climate of Mukeri Road is ideal but the rainfall of the place is reported to be scanty and not more than 20" annually.

(II) Proposals made in the Past:- This office was asked in May 1949 to prepare a preliminary Note on a combined Water Supply Scheme for Mukeri Road, Dhupdal and its surroundings. Accordingly a preliminary Note on a --- combined Scheme with Dhupdal lake as a source of supply for water supply (i) M.S.M.Railway, (ii) Dhupdal Colony, (iii) Karnatak Health Institute, (iv) Mukeri Road, (v) Industrial concerns & (vi) Hallapur village, estimated to cost Rs.3,55,000/- Net and Rs.4,50,900/- . gross with 27% D.W.P.charges was submitted to the Public Health Engineer to Govt., Poona, under this office No.T-45/5032 dated 24-8-1949. The scheme proposed a --- pumping station near the canal sluice gate at the Dhupdal lake, 8" pumping main, filter house with equipment and pressure filters, one 75,000 gallons capacity Service reservoir, distribution line on the main station road and 1/2" and 1" meters for private connections, Individual block consumers like Dhupdal Colony, Karnatak Institute etc. were proposed to be supplied water in bulk, who were to have their own distribution arrangements.

Continued on 2....

This scheme was not further considered, vide Govt. P.W.D.'s No.536/48-M dated 13-2-1950 addressed to the Public Health Engineer to Govt., Poona.

However the Govt. again referred the matter to the Public Health Engineer to Govt., vide Govt. U.O.R. dated 6-9-1951 (Govt.file No.3.95(3)/39767-J Branch) for a cheaper proposal to cater for the needs of --- (i) Mukeri Road, (ii) Mallapur village and (iii) Industrial concerns only.

(III) Population and present Water Supply Arrangements:-

(i) Mukeri Road population roundabout the Station is approximately 1500 and depends for its supply partly on the railway water and partly on the wells in the vicinity which go dry during the summer. There is a large proportion of floating population on account of the Karnatak Health Institute and once the water supply will be assured, private building activity here will get an impetus with an idea of hiring them to the visitors or reasons of health due to attraction of a good institute at hand.

(ii) Mallapur village is only 1/2 mile from Chataprabha Station and it will be desirable to include this village too for any water supply scheme that may be considered for developments.

(iii) The Belgaum Motors, Glass Factory and the Prakash Industries have no water supply arrangements as such to speak of.

(IV) Probable requirements:- For all the three consumers as above the probable demands of water from a cheaper ~~scheme~~ scheme may be summarized as under:-

	Immediate.	Ultimate.
(i) Mukeri Road.	40,000.	60,000
(ii) Mallapur village.	10,000.	20,000
(iii) Industrial concerns.	10,000.	15,000
TOTAL.	60,000.	95,000

Say 1,00,000 gallons/day.

Continued on 3....

(V) Probable sources:-

(i) The wells at Mukeri Road nearby area as well as Karnatak Health Institute go dry in summer year after year and none of these is so large as to give a daily yield of 1,00,000 gallons even in wet season. The question of using one of the existing wells in Mukeri Road as the source of supply therefore gets ruled out.

(ii) The second source which is the most favourable and striking one is the Dhupdal lake on basis of which this preliminary Note is drawn as the yearly draw off from this lake for water supply is not likely to ---- adversely tell upon its Irrigation and power commitments.

(VI) Proposed Water Supply Scheme:-

(a) Intake Chamber:-

It is learrt from the Executive Engineer, Ghataprabha Left Bank Canal Division that the lowest water level so far reached in the lake is R.L.1998.1. It is therefore proposed to construct a masonry submersible intake chamber at point P', a little beyond the lowest water line on the eastern part of the lake.

(b) The F.S.L. of the lake (after four feet high needles are placed on the weir) is reported to be 2012.6. A Jack well will therefore be located at a point Q, a little away from the F.S.L. line due east of P'. The Jack well will be a brick masonry sunk well. The depth of the Jack well would be 20 feet below ground in view of the F.S.L. and L.W.L. of the lake.

(c) Connecting pipe:- The Intake chamber and the Jack well will be connected between points P' & Q by means of a 12" Hume pipe approximately 1000 feet. Four Manhole chambers will be provided along the pipe line at an interval of 200 feet in order to facilitate the cleaning of the pipe line. The Manhole Chambers will be

.....

Continued on 4.....

normally under water and would be put to use only when the water level in the lake goes down clear of the manhole chambers.

(d) Pumping sets and Pump House:-

It is roughly estimated that the total lift of water from the Jack well would be about 110 feet from all causes. It is therefore proposed to provide a duplicate pumping set with a centrifugal pump capable of lifting 100 gallons/minute against a head of 110 feet driven by a 3 B.H.P. Oil Engine. The pumps will be worked for 16 hours a day during the second stage and for ---- correspondingly lesser hours during the initial stage.

The pumping sets will be housed in a small U shaped pump house resting partly on the wall of the Jack well and partly outside it.

(e) 6" C.I.Rising Main:- This will start from the Engine house near the Jack well and deliver water into the W.S.R. on a high ground opposite Mallapur village. The length of the rising main will be approximately 8,000 feet. Specials like S.V., Sc.V. and Air Valves etc. will be ~~provid~~ provided on the rising main wherever necessary.

(f) W.S.R. near Mallapur village:-

A service reservoir of 50,000 gallons capacity in two compartments will be constructed on a high ground to the western side of Mallapur village. The F.S.L. of the ~~Reservoir~~ Reservoir will be kept nearabout R.L.2070 so as to command the whole of the area under consideration. The water will not be subjected to any treatment except chlorination at the S.R.only. For this purpose one chlorine solution tank for each compartment will be provided on the Service Reservoir.

Continued on 5....

(g) Distribution system:-

Main will consist of 8" dia. delivery main and branch and Sub-mains of C.I.Pipes of 6", 4" and 3" and G.I.Pipes of 2" dia. The industrial concerns would be supplied in bulk and they should have their own arrangements for distribution.

(h) Chowkidar's Quarters:- One Chowkidar-cum-driver's Quarters will be provided near the Engine House and one Chowkidar's Quarters will be provided near the High Service Reservoir.

VII Cost of the Scheme:-

(i) Survey and preparation of the project	Rs.4,000/-
(ii) Masonry Intake Chamber beyond the low water x line.	Rs. 900/-
(iii) 12" Dia connecting pipe line 1000 feet long ---- including two control Sluice Valves 12" at either ends(@ Rs.8/- per Rft. overall.)	Rs.8,000/-
(iv) Manhole chambers 5'x 4' on the 12" Dia connecting pipe line @ 200' intervals 4 Nos. @ Rs.250/- each.	Rs.1,000/-
(v) 12 feet dia.Jack well 20 feet deep near the W.T.I.line.	Rs.5,000/-
(vi)U shaped Engine House resting partly on Jack well wall and partly on outside.	Rs.5,000/-
(vii)Duplicate pumping sets, each set consisting of a centrifugal pump capable of lifting 100 gallons per minute against a total head of 110 feet from all causes and driven by a 8 B.H.P. Oil Engine.	Rs.9,500/-
(viii) 6" C.I.rising main 3000 feet long including all specials @ Rs.9/- per Rft.	Rs.72,000/-
Carried over.	105300

Contin

(g) Distribution System:-

This will consist of 2" dia. delivery main and branch and Sub-mains of C.I.Pipes of 6", 4" and 3" and G.I.Pipes of 2" dia. The industrial concerns would be supplied in bulk and they should have their own arrangements for distribution.

(h) Chowkidar's Quarters:- One Chowkidar-cum-driver's Quarters will be provided near the Engine House and one Chowkidar's Quarters will be provided near the High Service Reservoir.

VII Cost of the Scheme:-

(i) Survey and preparation of the project	Rs.4,000/-
(ii) Masonry Intake Chamber beyond the low water line.	Rs. 800/-
(iii) 12" Pume connecting pipe line 1000 feet long ---- including two control Sluice Valves 12" at either ends @ Rs.8/- per Rft. overall.)	Rs.8,000/-
(iv) Manhole chambers 5'x 4' on the 12" Pume connecting pipe line @ 200' intervals 4 Nos. @ Rs.250/- each.	Rs.1,000/-
(v) 12 feet dia.Jack well 20 feet deep near the H.F.I.line.	Rs.6,000/-
(vi)U shaped Engine House resting partly on Jack well wall and partly on outside.	Rs.5,000/-
(vii)Duplicate pumping sets, each set consisting of a centrifugal pump capable of lifting 100 gallons per minute against a total head of 110 feet from all causes and driven by a 8 B.H.P. Oil Engine.	Rs.9,500/-
(viii) 6" C.I.rising main 8000 feet long including all specials @ Rs.9/- per Rft.	Rs.72,000/-
Carried over.	105300

Continued on 6.....

	Brought forward.	105 300
(ix) 50,000 gallons capacity R.S.R. in two compartments on the western side of Mallapur village including chlorine tank.		Rs.40,000/-
(x) Distribution system.		Rs.30,000/-
(xi) Chowkidar's Quarters (a) Chowkidar-cum-driver's Quarters near the pump house. (b) Chowkidar's Quarters near Service Reservoir.		Rs.10,000/-
	TOTAL.	Rs.1,85,300/- Net.
	Add 27% E.T.P.Charges.	Rs. 50,031/-
	TOTAL.	Rs.2,35,331/-Gross.
		Say Rs.2,35,300/-

VIII Annual Burden:-
(For Ultimate Stage).

(i) Interest on capital @ Rs.3½%	Rs. 8,236/-
(ii) Annual Sinking Fund on 30 years probable life with rate of interest @ 2½% (factor 0.0237)	Rs. 5,577/-
(iii) Current repairs, running and maintenance including consumable stores, machinery renewable fund etc.	Rs. 6,000/-
(iv) Cost of water @ Rs.6/- per 10,000 Cft. to be paid to ---- Irrigation Department. $\frac{365 \times 105}{6.25} \times \frac{6}{104}$	Rs. 3,510/-
(v) Establishment.	Rs. 8,000/-
TOTAL	Rs. 31,323/-
	Say Rs. 31,300/-

Cost of water per 1000 gallons =

$$\frac{31,300}{365 \times 105} \times 1000 = \text{Rs.0-13-9}$$

Say Rs.0-14-0
per 1000 gallons.

Public Health Engineer
to Govt. of Bombay.
Poona.

Executive Engineer,
Karnatak Public Health Works Division.

MRB/31.3.52.

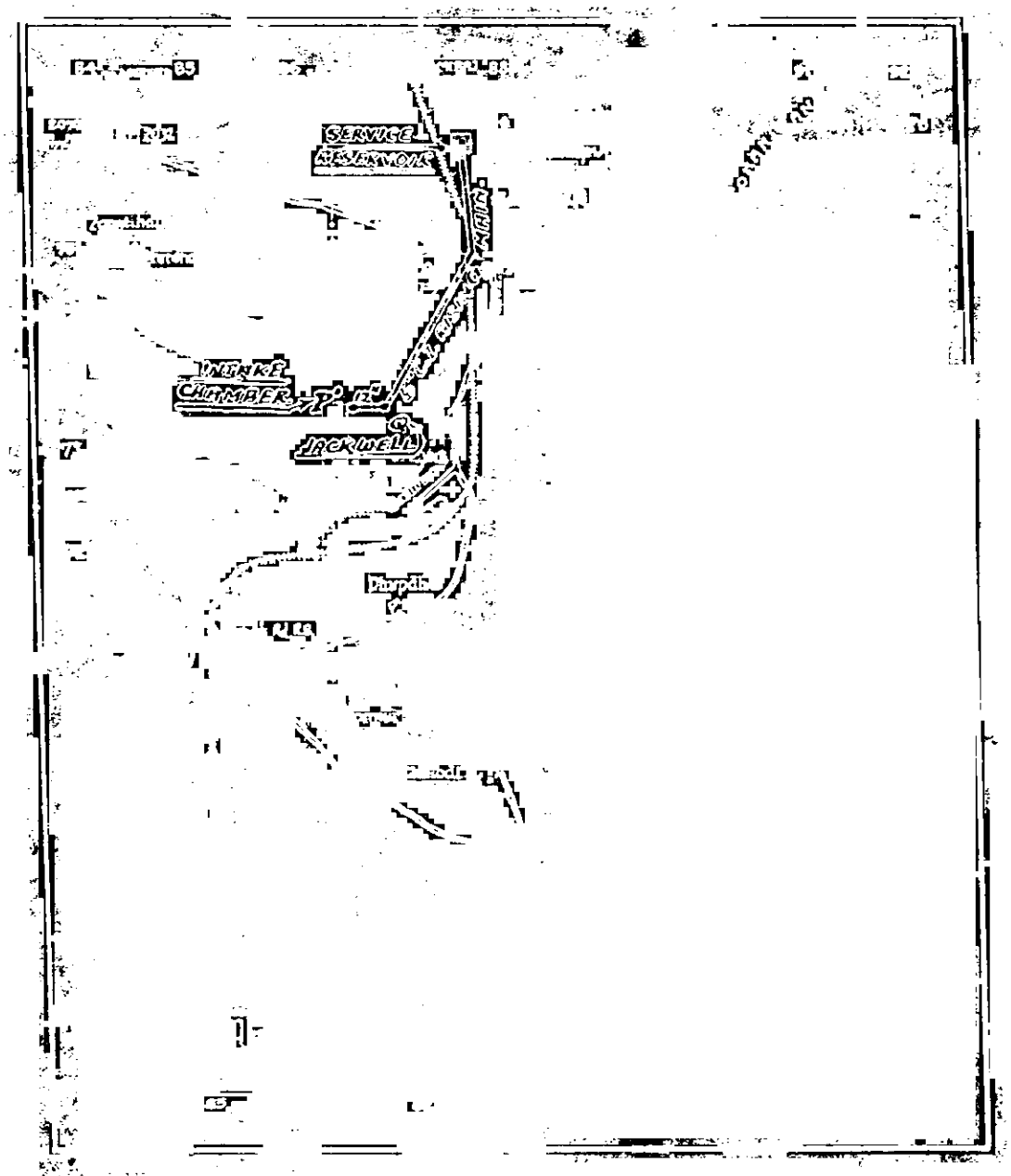
INDE[illegible]

Showing

DH[illegible]DHAL LAKE, HU[illegible]AD,

[illegible]PDHAL COLONY ETC

Scale [illegible]



G. Nuccari 8-4-52

EXECUTIVE ENGINEER
K.P.H.W. Dn. DHARWAR.

Public Health [illegible]
to Govt. of Bombay
[illegible]

TRACED BY : [illegible]
CHECKED BY :

Below U.O.R. dated the 6th September 1951, from the Government in P.W.D. regarding "Cheaper proposal for water supply to Ghataprabha (Hukeri Road)" - Government file No.S.95(3)/39767-J-Branch.

Returned with compliments.

2. I enclose, herewith a preliminary note on "Ghataprabha (Hukeri Road) water supply scheme", estimated to cost Rs.1,85,300/- Net or Rs.2,35,331/- gross, with 27% Establishment Tools and Plant charges, as against the previous proposal, estimated to cost Rs.3,55,000/- net or Rs.4,50,900/- gross with 27% Establish-ment Tools and Plant charges, submitted under this office No.S.W.3.31/9379 of 12-9-1949. The present proposal is intended to cater for only (i) Ghataprabha R(previously Hukeri road) (ii Mallapur village and the Industrial concerns as against the six places in the previous proposal.

3. An Index plan, showing the present alternative cheaper proposal, with the Dhupdal lake, as the source of water supply, is also enclosed herewith.

D.A: Govt. U.O.R.file.
Preliminary Note and
Index plan.
SIP/22-4-52.

Public Health Engineer
to Government.

By Registered Post.

U.O.R.No.S.W.3.31/ 4734 of 1952.

Poona 1, 24th April, 1952.

To

The Chief Engineer,
Public Works Department, Bombay 1.

Copy forwarded with compliments for information to the Executive Engineer, Karnatak Public Health Works Division, Dharwa with reference to his letter No.T-45/2406 dated the 9th April 19..

D.A. Nil.

J126-6
P.
S.95(3)
Serial No. 39843.

~~3~~ 21 S.95(30)/39767.

JBe

One D.O. to above exhibited under No. S.95(30)/39767-J dated the 3-3 ~~2~~.1952, marked 'Very urgent'.

Issued 5-3-52 JB

Sukde.

Issue ord. 16.2.52.

YBA 3-3-52

Issue ords. 3/3 ~~Illegible~~

Shri Kale 7/3

T. Hill 5.4.52

No.S.W.3.31/ 3037 of 1952.

Poona 1, Dated: 18 March 1952.

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject:- Water Supply to Hukeri Road: Proposals for the:

Reference:- Government, Public Works Department's Memo to the U.O.R. No.S.95-3/39767 dated 4.9.51, dated the 3rd March 51.

2. A modified preliminary note on Hukeri Road (New Ghataprabha) Water Supply is received in this office. Some detailed information has, however, been called for from the Executive Engineer, Karnatak Public Health Works Division, Dharwar, on receipt of which the Government U.O.R. file will be returned.

Public Health Engineer
to Government.

D.A. NIL.
GB:15.3.52/

Copy forwarded with compliments for information to the Executive Engineer, Karnatak Public Health Works Division, Dharwar.

S-95/3/26751

JBV

P.W.D.

Await

Kwk

11-4-52

4-4-52

Clivant (11-6-52) Supdtd.

11/4

S-95/3

26751

S 95(3)/39843

P. W. D.
" J "

Submitted with refec. to the U.O.R. dt. the 6-9-51.

2. These papers deal with the letter dt. the 31-3-51 from the president, Taluka Development Board, Gokak, Dist. Belgaum, requesting that arrangements made for water supply to the Dhupdal colony, Sanitorium at ~~Hukar~~ Hukeri and the mission school at Dhupdal, should be extended to ~~xxxxx~~ supply water to Hukeri Road by installing a big engine. The ~~xxxid~~ residents of the locality are ready to bear the expenses at a moderate rate.

3. The S.E.K.I.C. in this con. stated that the present arrangement for water supply to Dhupdal P.W.D. colony is a small temporary one and cannot be extended due to limited supply of ~~un~~filtration water. The requirement of mission School and Hostel in the vicinity of Ghataprabha colony is quite small and they will be supplied with small quantities of water only on condition that the supply will be stopped whenever there is shortage of water for the Colony. He, however, suggested that an independent scheme proposed by the P.H.E. for water supply to Karnatak Health Institute, Hukeri Road station area and its surroundings may be considered if the residents of Ghatprabha are willing to pay the charges. The independent scheme refd. to was estimated to cost Rs.3,55,000/-net or Rs. 4,50,000 gross with 27% E.T. and P. charges and envisaged ~~to~~ supply water to (1) M. & S.M. Rly. (2) Dhupdal Colony (3) Karnatak Health Institute. (4) Industrial Concerns (5) Hukeri Road and (6) Mallapur village. Out of the six parties the M.& S.M. Rly, The Karnatak public Health Institute and the Dhupdal Colony are getting water by some arrangements and (1) Hukeri Road (2) Industrial Concerns and (3) Mallapur village only now remain to be supplied with adequate water. P.H.E. was asked to suggest ~~any~~ other alternative suitable and economical scheme for water-supply to ~~take~~ these concerns. He has ~~acceding~~ accordingly submitted a preliminary note on "Ghataprabha — (Hukeri Road) water supply scheme estimated to cost Rs.1,85,300/- net or Rs...

Rs. 2,35,331/-gross with 27% E.T. ~~of~~ P. charges.

4. It is however, ~~and small~~ a small for consideration whether such a big scheme estimated to cost Rs.2·35lakhs should be taken up by Govt. for water supply to the village having ~~any~~ only about 2000 population. In fact water supply to the village or town is the responsibility of the local ~~xxxxxxxxxxxxxxx~~ body concerned, which is generally helped by way of Govt. grant-in-aid, ~~did~~. It would therefore be advisable in this case of the village Panchayat at Hukeri Road takes up the scheme with usual grant - in - aid ~~from~~ for Govt. The P.H.E. may be asked to addressed the village Panchayat at Hukeri Road in the ~~smaller~~ small and see whether it is prepared to take up the scheme with Govt. grant -in- aid. If that body is not prepared to take ~~each~~ of the scheme, perhaps there is no ~~alternatives~~ alternative but to drop the proposal.

Secy. DE (Agl)

8.5.52.

9.5.52

D.
9.5.52.

KKW/8-5-52.

Owing to financial stringency, the scheme has no chance of acceptance as a Govt. scheme.

Secy 10/5

41
10/5/52

Executive Engineer
10/5

S.95(3)/39843

27

J.B.E

Resubmitted.

2. A draft letter addressed to the President Taluka Development Board Gokak ff 2930 and copy endorsed to the A.D.E. to Govt. is put up for approval.

— Theo. D E (O+)

ons 22.5.52. GMA 23.5.52

23.5.52

ds

S. 95 (30)/39843.

29

In English

S. W. D.

No. S. 95 (30)/39843-V

B. C. (Bombay No. 1)

4 May 1952.

26

To

The President, Taluka Development Board, Dahanu, Dist. Kolaba.

Sub:— Water supply to Mukari Road.

Sir,

I am directed to refer to your letter No. dt. the 31-3-52 addressed to the H. C. M., Bombay, on the subject mentioned above, and to state that the present arrangement for water supply to the Dhrupdal colony is a small & temporary one and cannot, therefore, it is regretted, be extended to due to limited supply of unfiltered water. The P. H. E. Dept. has however, suggested a water supply scheme for Mukari Road, Mallapur Village and Industrial Concerns, which is estimated to cost Rs. 2 lakhs but in view of the present financial stringency, this scheme

does not stand any 3° chance of acceptance as a Govt. scheme. The D.H.E. is therefore, being requested to contact the Village Panchayat at Hukeri Road fix taking up the above-mentioned scheme with usual Govt. D.A. N.C.L. grant-in-aid.

Yours faithfully

Asst. Secy. to Govt.

Copy to the D.H.E. to Govt., with ref. to his ltr No. S.W. 3.31) 4734 dtd. the 24-4-52.

2. The D.H.E. is requested to approach the Village Panchayat, Hukeri Road and see whether it is prepared to take up the scheme with usual Govt. grant-in-aid.

Copies to the Ex. Engr., Karnatak Public Health Works etc.

Govt
M.552.

Issue
26/5

No. S.95(3)/39843-J.

Public Works Department,
Bombay Castle (Bombay No.1),
26th May 1952.

From

The Assistant Secretary to the Government of Bombay,
Public Works Department.

To

The President,
Taluka Development Board,
Gokak, District Belgaum.

Subject:- Water supply to Hukeri Road.

Sir,

With reference to your letter dated the 31st March 1951, addressed to the Honourable the Chief Minister, Bombay, on the subject mentioned above, I am directed to state that the present arrangement for water supply to the Dhupdal Colony is a small and temporary one and cannot, it is regretted, be extended due to limited supply of ~~the~~ infilteration water. The Public Health Engineer to Government , Poona, has suggested a water supply scheme for Hukeri Road, Mallapur Village and Insustrial concerns, which is roughly estimated to cost Rs.2 lakhs but in view of the present financial stringency, this scheme does not stand any chance of acceptance as a Government scheme. The Public Health Engineer is therefore, being requested to contact the village panchayat at Hukeri Road for taking up the above-mentioned scheme with usual Government grant-in-aid.

Yours faithfully,

Assistant Secretary to the Government of Bombay,
Public Works Department.

D.A.-Nil.

4.
RKP
26-5-52.

Copy to the Public Health Engineer to Government with reference to his Un-Official Reference No. S.W.3.31/4734, dated the 24th April 1952.

2. The Public Health Engineer is requested to approach the village panchayat, Hukeri Road and see whether it is prepared to take up the scheme with usual Government grant-in-aid.

Issued
27-5-52

Copies to the Executive Engineer, Karnatak Public Health Works Division.

Letter. No. S.W.3-31/7302 of 1952,

Poona 1, 17th June 1952.

To

The Sarpanch,
Village Panchayat, Hukeri Road,
Hukeri Road (Ghataprabha) Distt. Belgaum.

Sub:- Water Supply to Hukeri Road (Ghataprabha)

Sir,

Government has asked this office to approach your Village Panchayat in connection with the scheme of Water Supply to Hukeri Road. This office has prepared a Preliminary Note on the "Ghataprabha (Hukeri Road) Water Supply Scheme, estimated to cost Rs. 1,85,300/- net or Rs. 2,35,331/- gross with 27% Establishment, Tools and Plant charges. The scheme includes the water supply to Ghataprabha (previously Hukeri Road), Mallapur Village and the Industrial Concerns. Your Village Panchayat will get the usual 50% Government grant-in-aid and you will have to share the remaining half of the total cost of the scheme. The annual Burden to the Village Panchayat due to the scheme, comes to Rs. 31,300/- approximately.

2. You are, therefore, requested to inform this office immediately whether you are interested in the scheme. On receipt of your reply, the Preliminary Note on the above water supply, prepared by this office, will be sent to you for necessary acceptance of your Village Panchayat.

3. Your reply by return of post will be much helpful to enable me to inform Government in the matter.

Yours faithfully,

Public Health Engineer
to Government.

D.A. Nil.
DWK/17-6-52.

Copy submitted for information, to the Secretary to Government, Public Works Department, Bombay, with reference to Government letter, Public Works Department No. S.95(3)/39843-J of 26th May 1952.

2. Further action will be taken on receipt of the Village Panchayat's reply.

Copy forwarded with compliments, for information, to the President, Taluka Development Board, Gokak, Distt. Belgaum.

Copy forwarded with compliments, for information, to the Executive Engineer, Karnatak Public Health Works Divn., Dharwar.

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ϕ W.D.

submitted with ref to the
G.E. No. S 95(3)/39843-J/31 dt the
26.5.52

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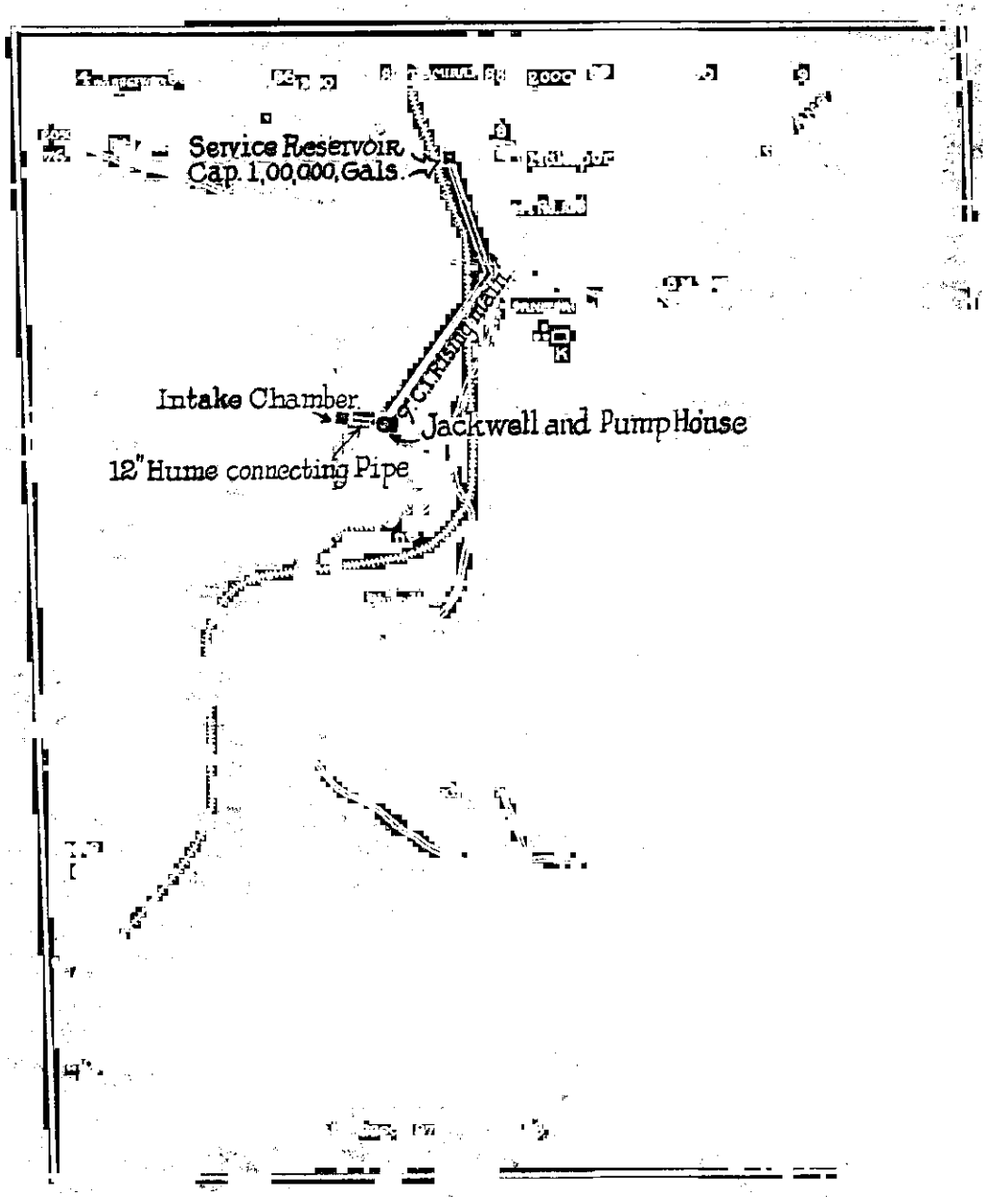
INDEX PLAN
Showing
DHUPDHAL LAKE, HUKERI ROAD, DHUPDHAL COLONY ETC



Executive Engineer
Karnatak Public Health Works Dn, Dharwar

3)

Preliminary Note on Water Supply
to Hukeri Road(now Ghataprabha)
the centre of the community Project.

..... ›

1. General Description :- Hukeri Road (now Ghataprabha) is akx railway station 210 miles from Poona on the Poona-Bangalore link of the Southern Railway. It is 34 miles by road from Belgaum There is a well-known "Karnatak Health Institute" treating in particular Tuberculosis patients. Other important concerns such as a Glass Factory, Prakesh Industries and Belgaum Motors have made a beginning. It is situated on the easterly slope of a ridge dividing the Krishna and the Ghataprabha valleys.

This place is now selected as a centre for a community Project in the Karnatak region and in conformity with general developments envisaged, a protected piped water su ply scheme for such a centre is absolutely necessary.

2. Population and Probable requirements :- The population at this centre is likely to re ch about 12,000(vide Public Health Engineer's letter No.S.W.3.31/8698 dated 17-7-1952) and it may increase in proportion to the developments and activities. The daily supply is taken on the basis of 15 gallons per head per day which will be equivalent to 1,80,000 gallons a day. Should the demand gradually increase the scheme as chalked out in rough will be capable of catering the extra needs of water supply by working the pumps for longer hours.

3. Probable source :- The wells at Hukeri Road, nearby area as wellas in the Karnatak Health Institute go dry in summer year after year and none of these is so large as to give a daily yield of 1,80,000 gallons even in the wet season. The question of using one of the existing wells in this locality as a source of water supply therefore gets ruled out.

The second source which is the most favourable and striking is the Dhupdal Lake on basis of which this preliminary note is drawn as the yearly draw off for water supply from this lake is not likely to adversely tell upon its irrigation and power commitments.

4. Proposed Water Supply Scheme :-

(a) Intake chamber :- It is learnt from the Executive Engineer, Ghataprabha Left Bank Canal Division that the lowest water level so far reached in the lake is R.L.1998.1. It is, therefore, proposed to construct a masonry submersible intake chamber a little beyond the lowest water line on the eastern fringe of the lake.

(b) Jack-well :- The F.S.L. of the lake(after four feet high needles are placed on the weir) is reported to be R.L.2012.6. A jack well will,therefore, be located at a safe place above this F.S.L. The jack well will be a brick masonry sunk well. The depth of the jack well will be 20 ft.below ground in view of the F.S.L. and L.W.L. of the lake.

(c) Connecting pipe :-The intake chmber and the jack well will be connected by means of a 12" Hume pipe approximately 1000 ft. Four manhole chambers will be provided along the pipe line at an interval of 200 feet in order to facilitate the cleaning of the ~~it~~ pipe line. The manhole chambers will be normally under water and would be put to use only when the water level in the lake goes down clear of the manhole chambers.

(d) Pumping Sets and Pump House :- It is roughly estimated that the total life of water from the jack well upto the service reservoir would be about 112 feet from all causes (please vide calculation sheet appendix No.1) on the basis that the total qu of 1,80,000 gallons will be umped in 8 hours. If more wat

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39

be required, this could be had by working the pumps for proportionately longer hours and this is a desirable feature in view of the developments likely to materialize. It is,therefore, proposed to provide a duplicate pumping set with a centrifugal pump capable of lifting 375 gallons per minute gx against a head of 112 feet.

The pumping sets will be housed in a small U shaped pumping station partly resting on the steining of the jack well and partly outside it.

(e) C.I.Rising Main :- This will start from the engine house over the jack well and deliver water into the service reservoir. The length of the rising main will be approximately 8000 feet. Specials like sluice x valves, scour valves, Air valves and other accessories will be provided.

(f) Service Reservoir :- The service reservoir will be located on a natural high ground due west of Mallapur village. The F.S.L. of the xxx reservoir will be kept nearabout R.L.2070 so as to command the whole of the "centre" area. The capacity of the service reservoir will be 1,00,000 gallons in two compartments.

The water will not be filtered but only Chlorine solution at the service reservoir will be administered. For this purpose one Chlorine Solution tank for each compartment will be provided on the service reservoir.

(g) Distribution System :- This will consist of 9" dia.C.I. delivery main with C.I. branches and submains ranging from 8" to 3" and 2" G.I. pipes suitably designed to give a satisfactory working head of about 20 feet at the taps. The distribution system will consist of all usual accessories such as valves etc.

(h) Staff Quarters :- Quarters for one Driver and one Chowkidar will be provided near the Jack well pumping station and one quarter for a chowkidar will be provided near the service reservoir. Other staff for the maintenance of water works will find accommodation in the village nearby.

5. Approximate cost of the schere :-

(i)	Survey and preparation of a detailed project.	...Rs.	5,000/-
(ii)	12" Hume Connecting pipe line approximately 1000 ft. including two central sluice valves at either ends @ Rs.8/- per foot overall.	...Rs.	8,000/-
(iii)	Manhole chambers 5'x4' on the 12" Hume connecting pipe line @ 200 feet interval - 4 Nos. @ Rs.250/- each.	...Rs.	1,000/-
(iv)	Masonry intake chamber beyond the law water line.	...Rs.	1,000/-
(v)	15 feet diameter Jack well about 20 feet deep near F.S.L. line.	...Rs.	5,000/-
(vi)	U shaped engine house resting partly on jack well and partly outside.	...Rs.	5,000/-
(vii)	Duplicate 25 B.H.P. diesel driven pumping sets each capable of discharging 375 g.p.m. against a head of 112 feet from all causes.	...Rs.	25,000/-
(viii)	9" C.I. rising main approximately 8,000 feet @ Rs.12/- per foot.	...Rs.	96,000/-
(ix)	Service Reservoir - 1,00,000 gallons capacity in two compartments.	...Rs.	75,000/-
(x)	Distribution system comprising of 9"-8" etc.pipes	Rs.	100,000/-

3.....

(xi) Staff quarters –
(a)Driver & Chowkidar – Rs.7,000/-
(b) Chowkidar ... – Rs.3,000/- Rs. 10,000/-

Rs. 3,31,000/-

(xii) Land acquisition. Rs. 2,000/-

Total Rs. 3,33,000/- Net

Add 27% Establishment Tools and Plant charges on items (i) to (xi) both inclusive. Rs. 89,370/-

Rs. 4,22,370/-

say Rs. 4,22,400/-Gross

6. Probalbe annual burden :-

(i) Interest on capital @ 4% on Rs.4,22,400/- Rs. 16,898/-

(ii) Annual sinking fund on 30 years life and rate of improvement@ 2½% (F = 0.0237) Rs. 10,010/-

(iii) Annual maintenance charges –
(a) All works except pumping machinery, C.I. pipe lines and land compensation.
(Rs.3,31,000 – Rs.2,21,000)=Rs.1,10,000/-
@ 1% = Rs.1,100/-
(b) C.I. pipe lines Rs.1,96,000 @ ½%
=Rs. 980/-
(c) Pumping machinery including machinery renewal fund Rs.25,000 @ 7½% = Rs.1,875/-
(d) Consumable stores and fuel etc.for working the pumps and chemicals = Rs.6,000/-
(e) Establishment for maintenance –
One Driver
@ Rs.100 = Rs.1,200/-)
Two Chowkidars.)
@ Rs.65/- =Rs.1,560/-)
Two Turnkeys.)
@ Rs.65/- =Rs.1,560/-) Rs.4,320/-

Rs.14,275/- Rs. 14,275/-

(iv) Cost of water @ Rs.6/- per 10000 Cft. to be paid tothe Irrigation Department for purchase of water from the lake.
$= 365 \times \frac{1,80,000}{6.25} \times \frac{6}{10,000}$ = Rs.6,307/- Rs. 6,307/-

Grand Total 47,488/-

Say Rs. 47,500/- per year.

The cost of water per 1000 gallons therefore would work out to

Rs. $\frac{47,500 \times 1,000}{365 \times 1,80,000}$ = Rs. .724 = Rs.-/11/6.

7. Purification Works :- Should it be decided to resort to filtration, approximate cost of the filtration works including running and maintenance costs have been worked out separately in Appendix II attached herewith. With the filtration works in operation cost of water per 1,000 gallons works out to Rs.1/-/3. [illegible] of filters however, could be safely deferred to a later date if the conditions may so demand.

SLP/18-8-52.

APPENDIX II.

Probable capital, M. & R. and running cost of simplicity filters for Hukeri road water supply.

Note:-The extra pumping lift necessitated by introduction of filters will be catered for by the H.P. of the engines provided.

(A) Capital cost.

(i) Aeration fountain, flocculator clarifier and alum solution tank with accessories.	Rs. 50,000/-
(ii) Four filter beds 25'x16' each (3 working and 1 standby) with accessories and filter house.	Rs. 80,000/-
	Rs.130,000/-
Add 27% E.T. & P. charges.	Rs. 35,100/-
Gross-	Rs.165,100/-

(B) Annual burden:-

(i) Interest on capital @ 4%.		...Rs.6,604/-
(ii) Annual sinking fund on 30 years life and rate of improvement @ 2½%(F= 0.0237)		...Rs.3,913/-
(iii) Annual maintenance charges @ 2%.		...Rs.3,302/-
(iv) Chemicals - Sulphate & alumina & amonia etc.		...Rs.2,000/-
(v) Establishment for working the filters -		
One Filter Attendant Rs.100-	1,200/-	
One Chemical Clerk Rs.100-	1,200/-	
One Mazdoor Rs. 65/-	780/-	
	3,180/-	...Rs.3,180/-
		...Rs.18,999/-
		say Rs.19,000/-

(C) The overall financial aspect inclsive of filters will therefore be as follows :-

		Without filters.	Add extra for filters.	Total with filters.
Capital Cost Net	Rs.	3,33,000/-	Rs.1,30,000/-	Rs.4,63,000/-
Capital Cost Gross.	Rs.	4,22,400/-	Rs.1,65,100/-	Rs.5,87,500/-
Annual burden .	Rs.	47,500/-	Rs. 19,000/-	Rs. 66,500/-
Cost of water per 1000 gallons delivered.	Rs.	0/11/6	-	Rs. 1/-/3.

Public Health Engi[neer] to Gover[nment]

SLP/18-8-52.

No.S.W.3.31/ 9921 of 1952.

Poona 1, 18 August, 1952.

To

The Secretary to Government,
Local Self Government and
Public Health Department, Bombay 1.

Subject :- Piped Water Supply to Ghataprabha (Formerly Hukeri Road) Community Project Area - Preliminary Note on ---

As desired by the Hon'ble Minister for Local Self Government, I discussed the scheme of water supply to Ghataprabha on the 16/17th July, 1952. The Hon'ble Minister desired that the scheme should provide water supply for 12,000 souls of the area under Community Development Project at Ghataprabha and exclude the village population of Mallapur, as the village is not likely to shoulder any financial burden due to such a scheme.

2. Accordingly, I am enclosing, herewith a Preliminary Note on water supply to the Community Development Project Area at Ghataprabha.

3. The scheme :-The scheme, which is fully described in the accompanying note, in brief, is as under :-

As stated above, the scheme provided fof 12,000 souls at a water supply rate of 15 gallons per head per day. The Dhupdal Lake is the source of water supply selected for the scheme. An intake chamber will be constructed near the fringe of the Lake as shown in the Index plan (enclosed herewith). Water from the chamber will be led through a 12" dia. 1000 ft. long Hume connecting pipe (with 4 Nos. of 5' x 4' inspection chambers on the connecting pipe line) to a 15 ft. dia. jack well, about 20 ft. deep. A U-shaped engine house partly on the jack well and partly outside it, will be built to accommodate duplicate sets of 25 B.H.P. diesel engine driven pumping machinery, capable of discharging 375 g.p.m. against a total head of about 112 ft. Water will be pumped through a 9" dia. rising main, about 8000 ft. long to a ground service reservoir of one lakh gallons capacity, located on a hillock due west of Mallapur village. Water will be then chlorinated and distributed to the Community Area through a net-work of 9", 8" to 3" C.I. and 2" G.I. pipes. Staff quarters for a driver and one Chowkidar near the engine house only are provided as the remaining staff will find accommodation in the village nearby. In case it is decided to instal surface purification plant and give filtered water supply, the cost of these works is separately indicated in the Appendix II.

4. Financial Forecast :- The scheme, as described above, is estimated to cost Rs.3,33,000/- net or Rs.4,22,400/- gross, with 27% Establishment Tools and Plant charges (excluding filtration plant). Including the filtration plant, the scheme will cost Rs.4,63,000/- net or Rs.5,87,500/- gross, with 27% Establishment Tools and Plant charges. The annual burden due to these two proposals will be Rs.47,500/- and Rs.66,500/- respectively; which give cost of water as As. 11½ and Rs.1-0-3 per 1000 gallons respectively. In view of the high cost of filtered water supply, installation of the purification works may be deferred to stage II. The scheme will have to be financed and maintained wholly as a Government scheme.

5. A copy of the Note, is being separately sent to the Personal Assistant to the Minister for Local Self Government for the Minister's information as directed.

D.A. 1 Note.
2 Appendices.
Index plan.
SIP/18-8-52(6)

Public Health Engineer
to Government

49.

Copy with a cop, of the Note together with its accompaniments, forwarded with compliments to the Chief Engineer, Public Works Department, Bombay No.1.

2. The present note is prepared after due modifications to the Note, already submitted to Government in P.W.D. under this office U.O.R.No.S.W.3.31/4734 of 24-4-1952 (vide also this office No.S.W.3.31/7302 of 17-6-52).

D.A. As above.

Copy forwarded with compliments for information to the Executive Engineer, Karnatak Public Health Works Division, Dharwar, with reference to his No.T-45/5689 dated 10-8-52.

S95(3)/77478

Submitted for information

Record

29/8/52

30.8.52

P. W. D.
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